

FIG. 1

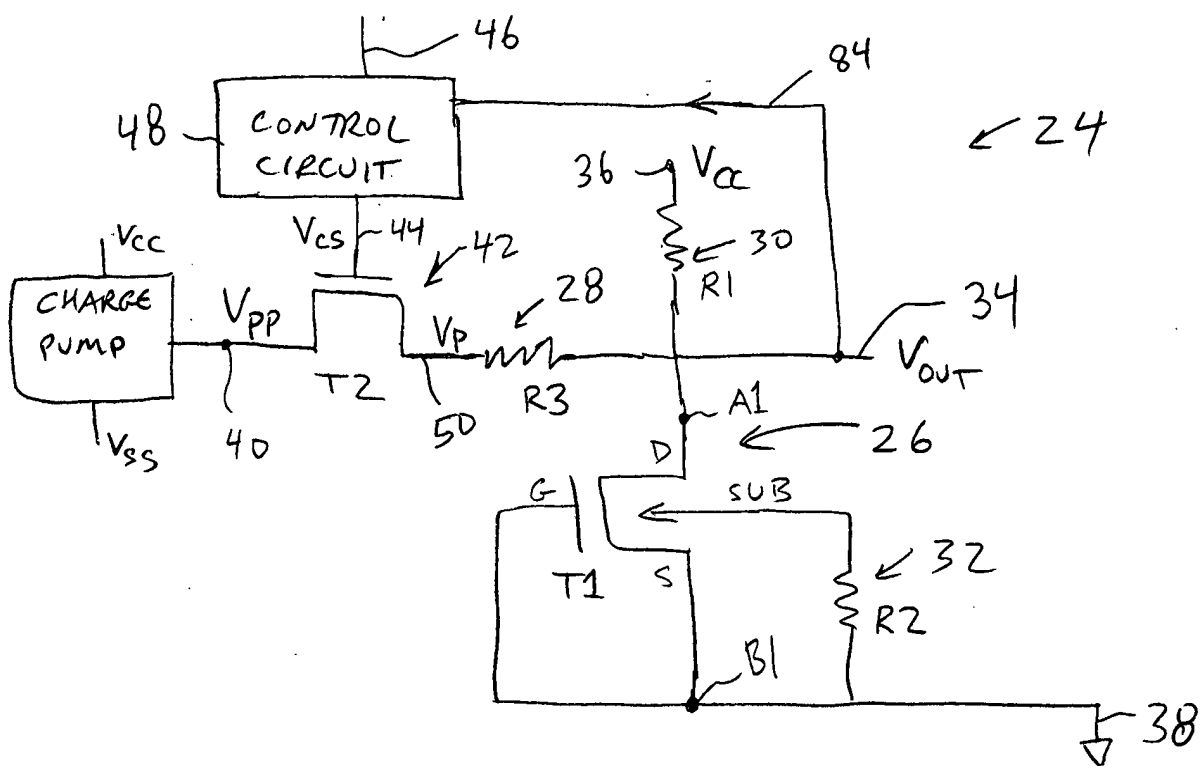


FIG. 2

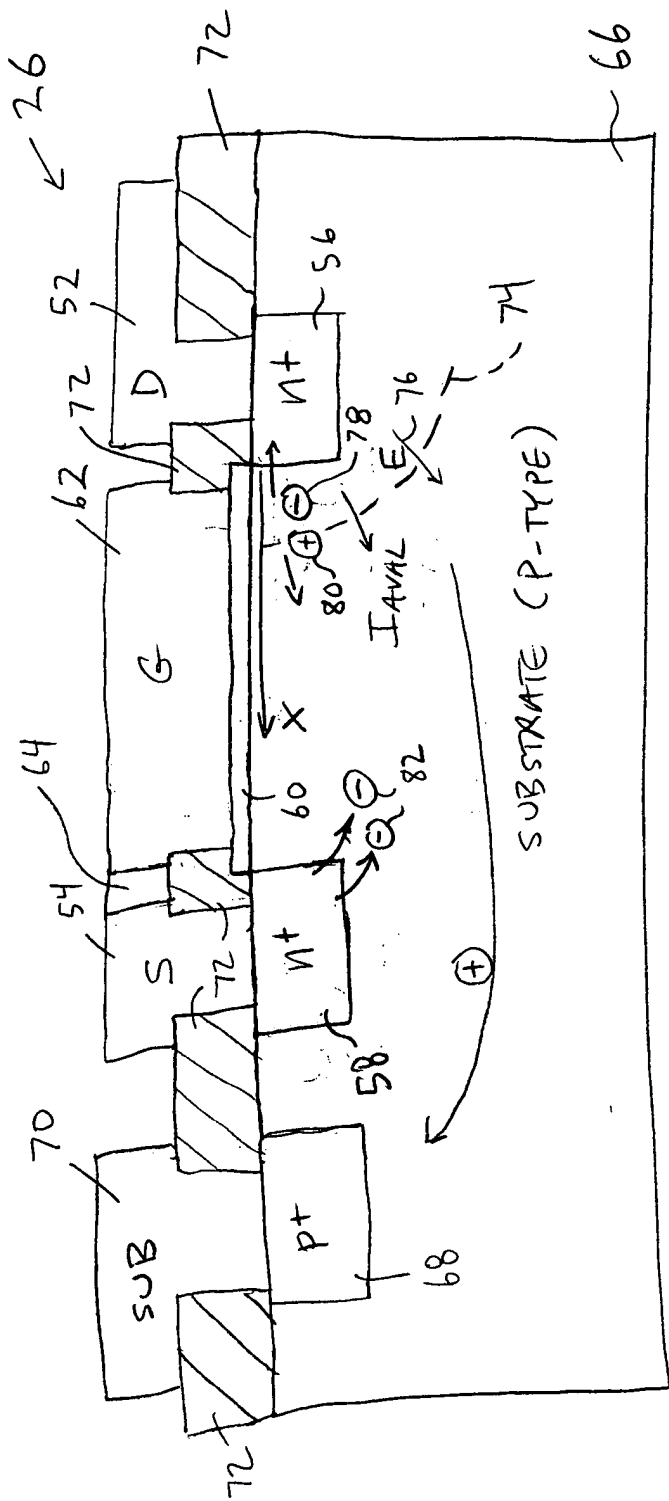


FIG. 3

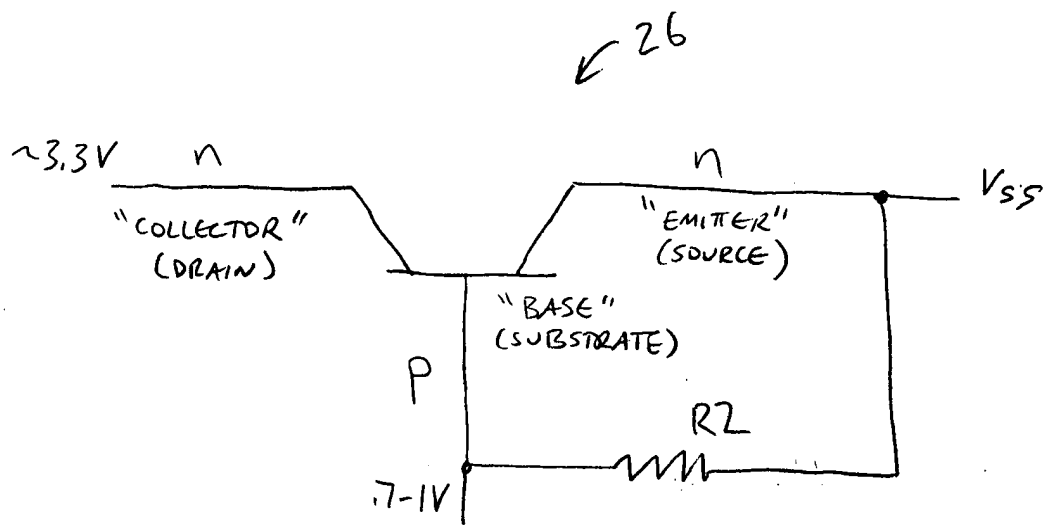


FIG. 4

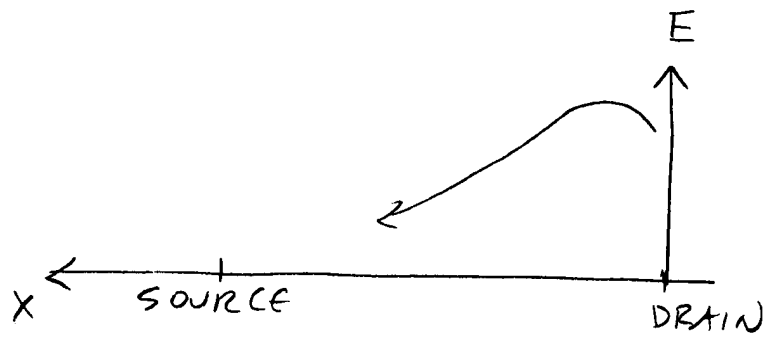


FIG. 5a

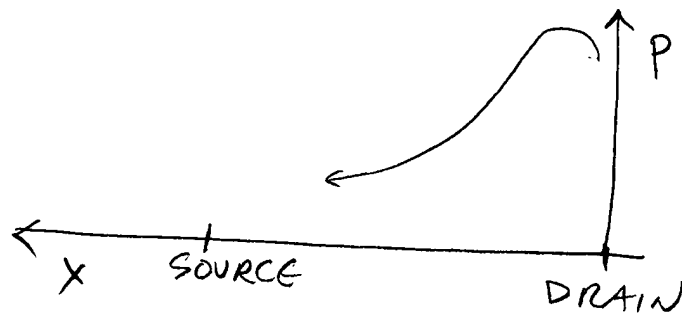


FIG. 5b

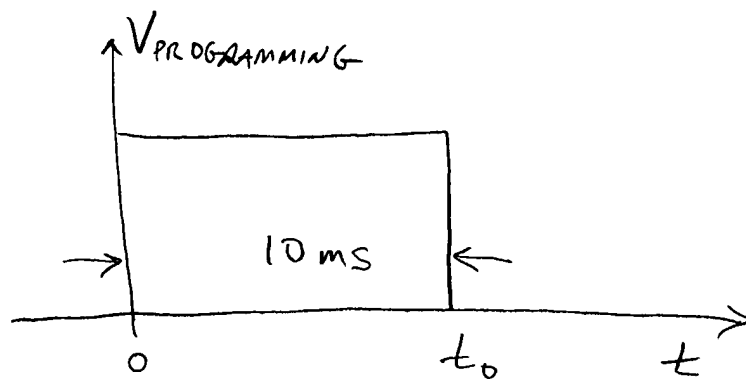


FIG. 6a

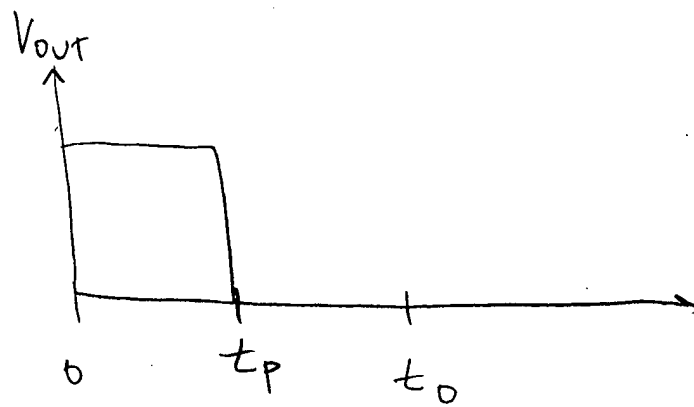


FIG. 6b

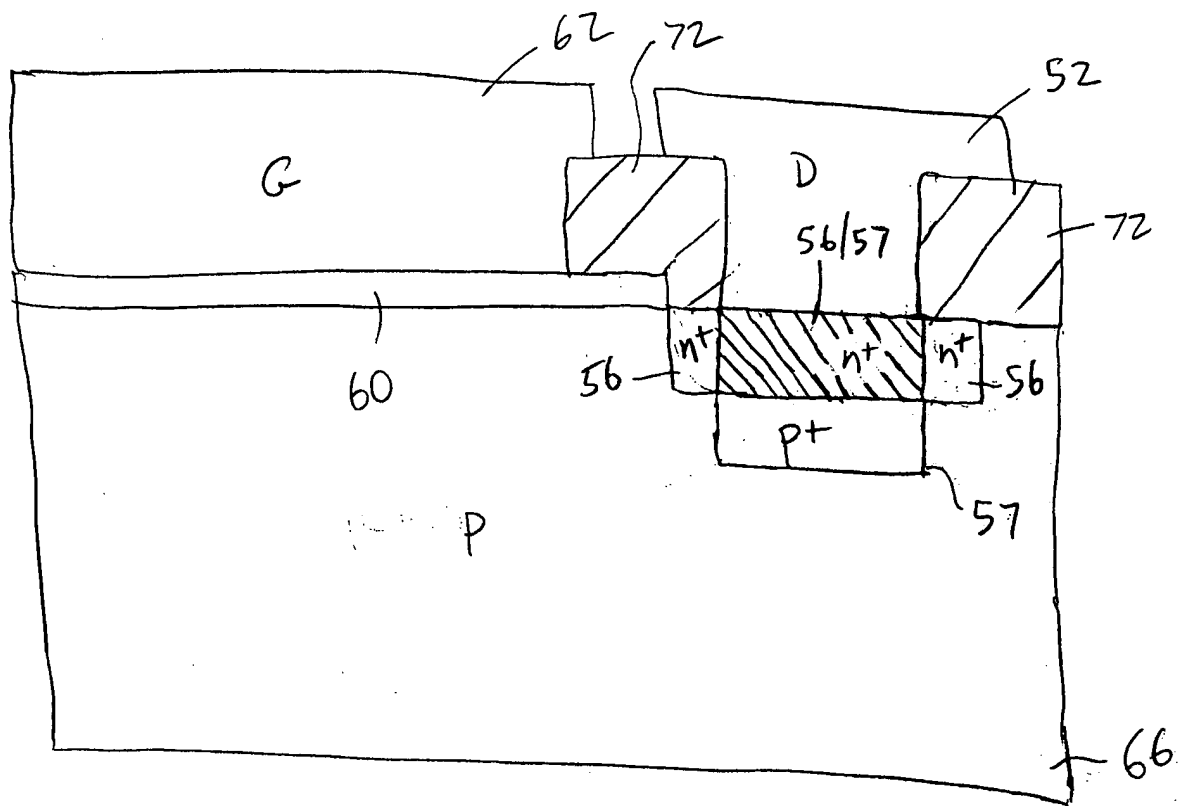


FIG. 7

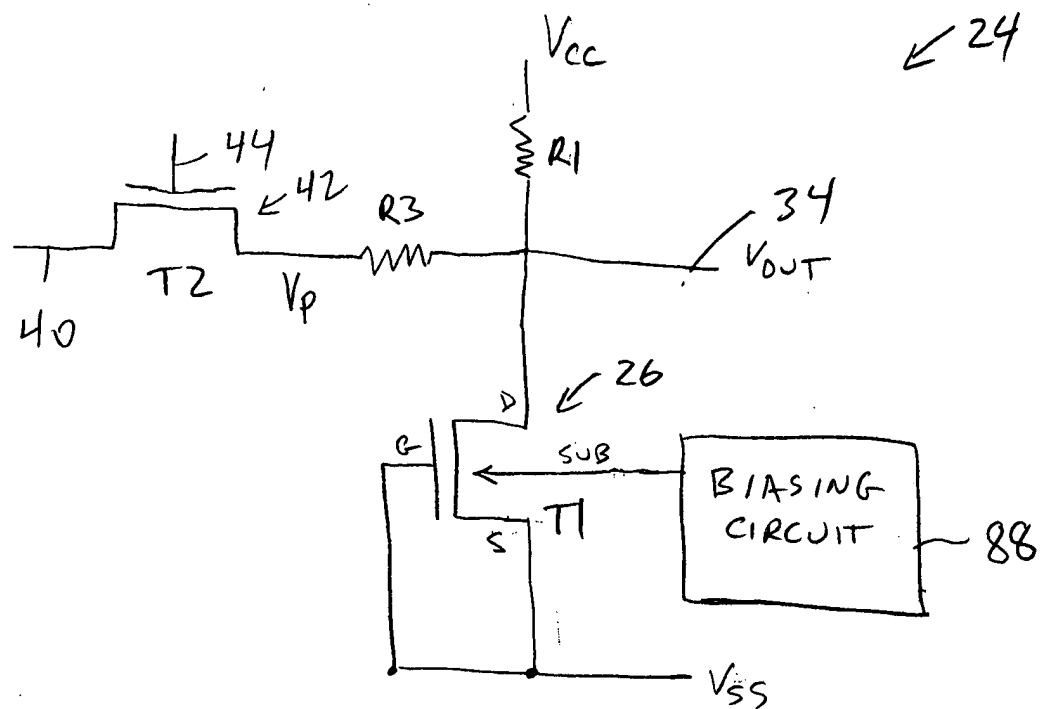


FIG. 8

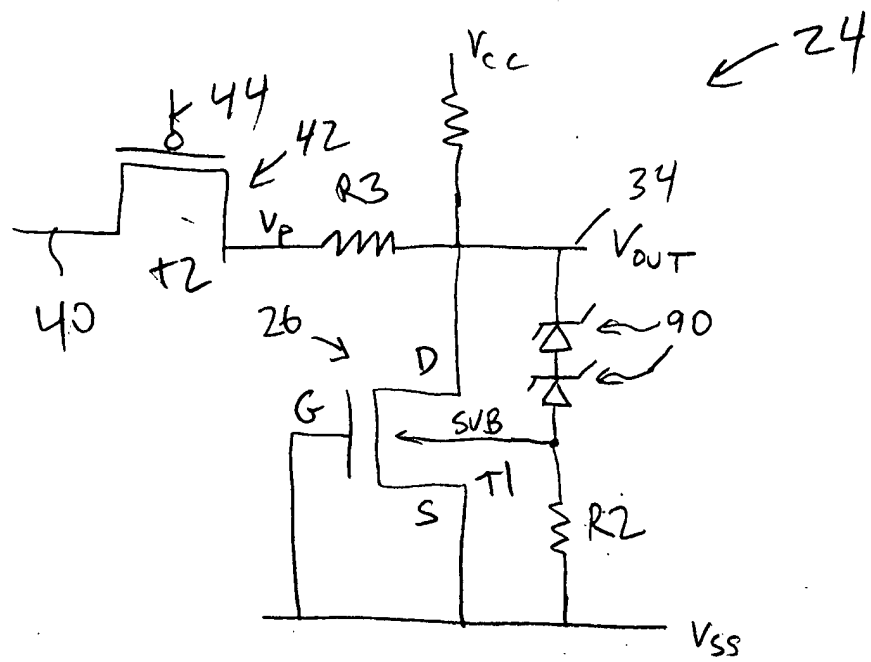
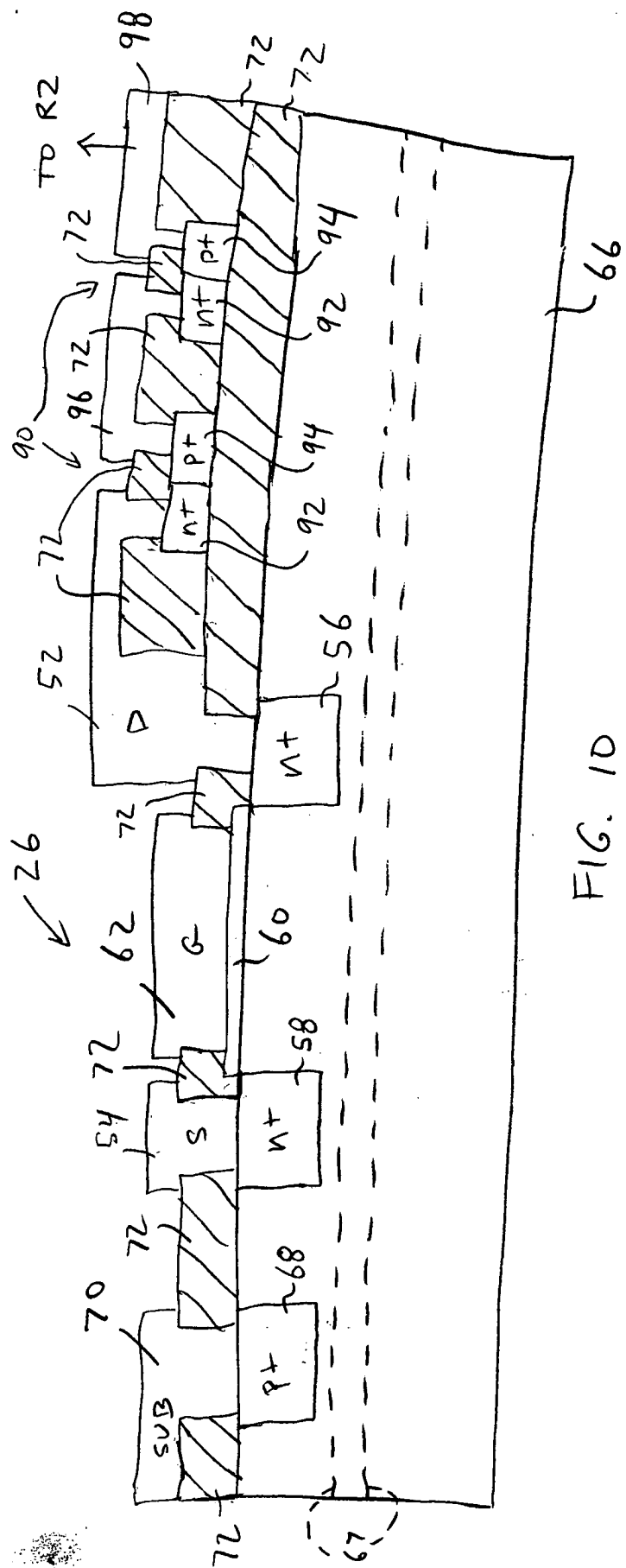


FIG. 9



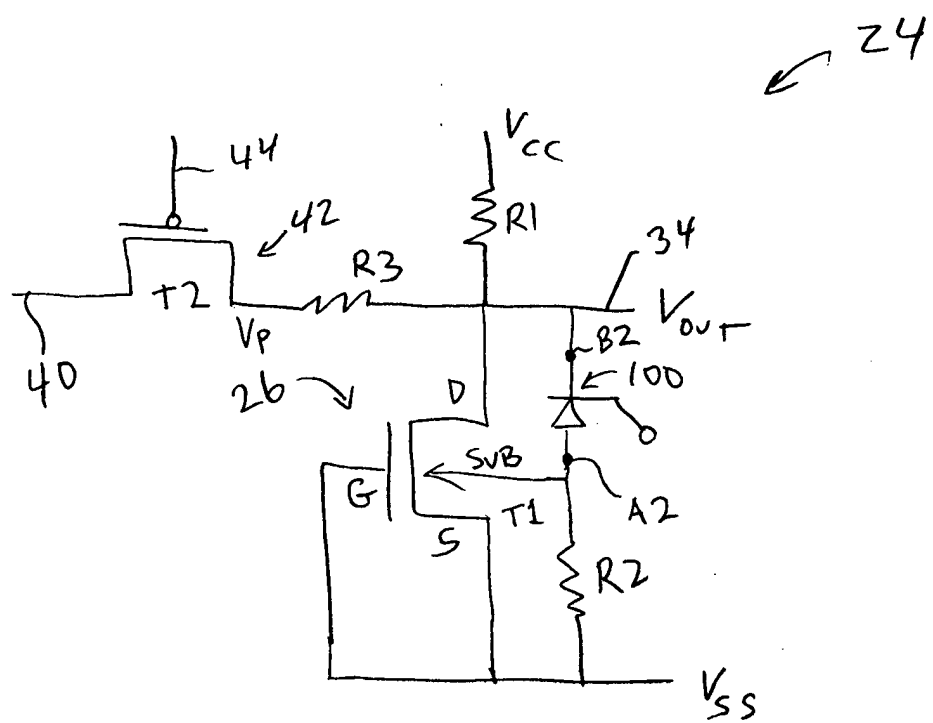


FIG. 11

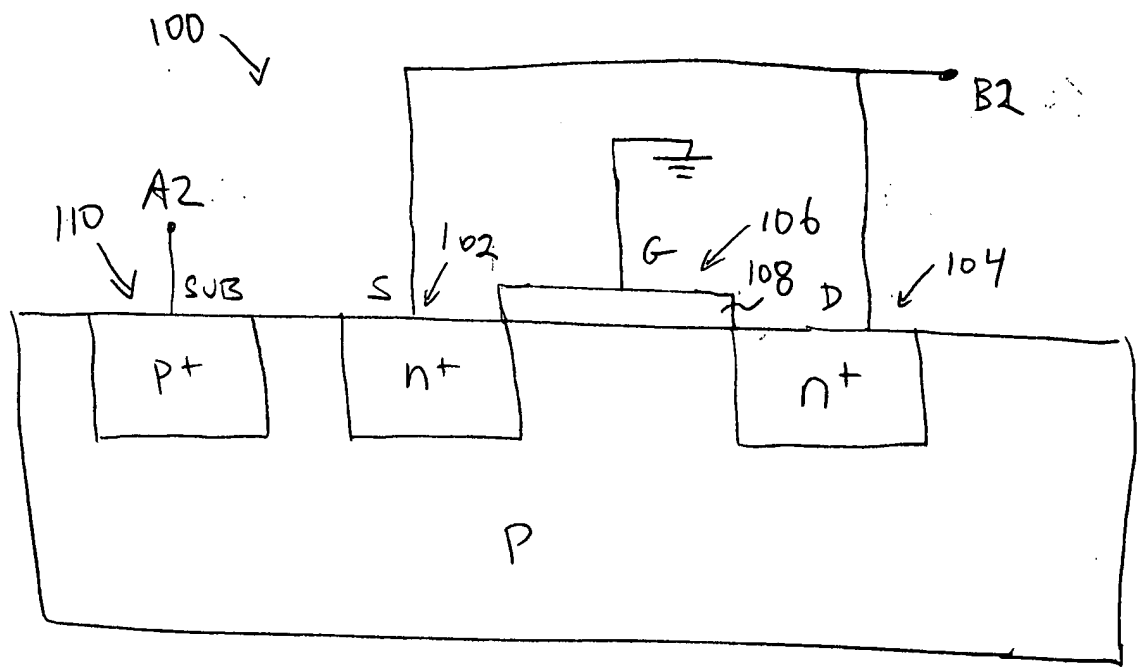


FIG. 12a

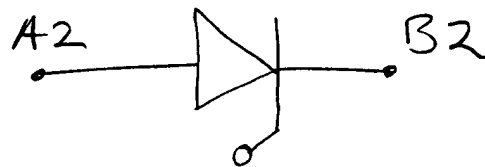


FIG. 12b

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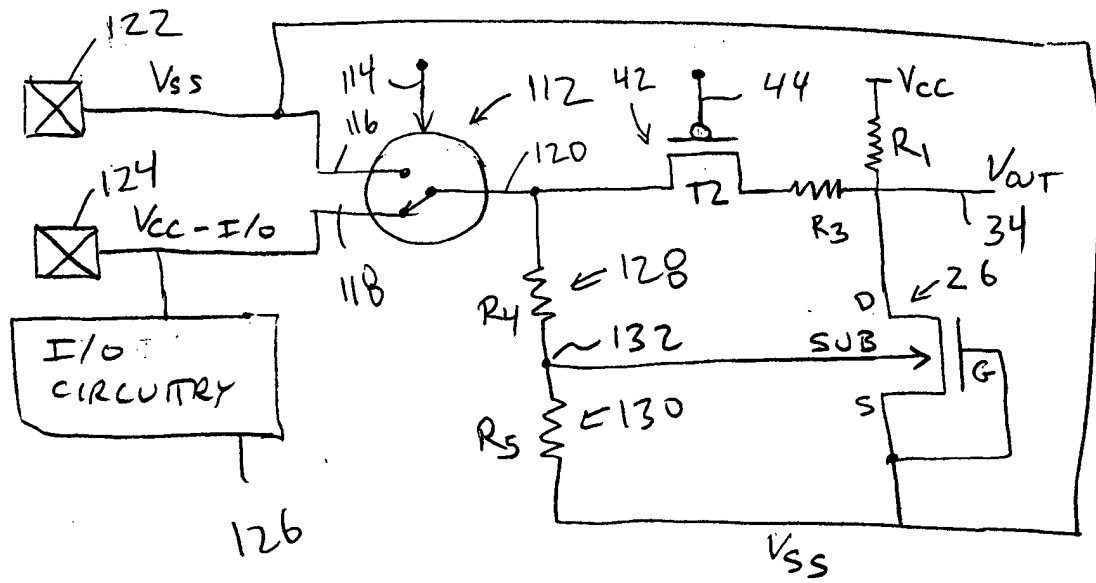
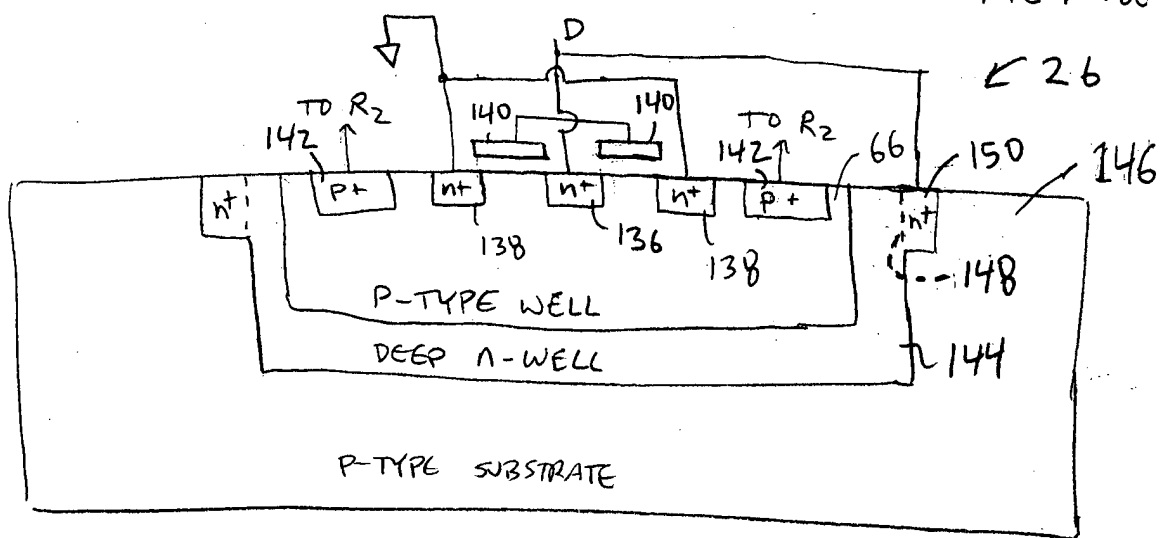
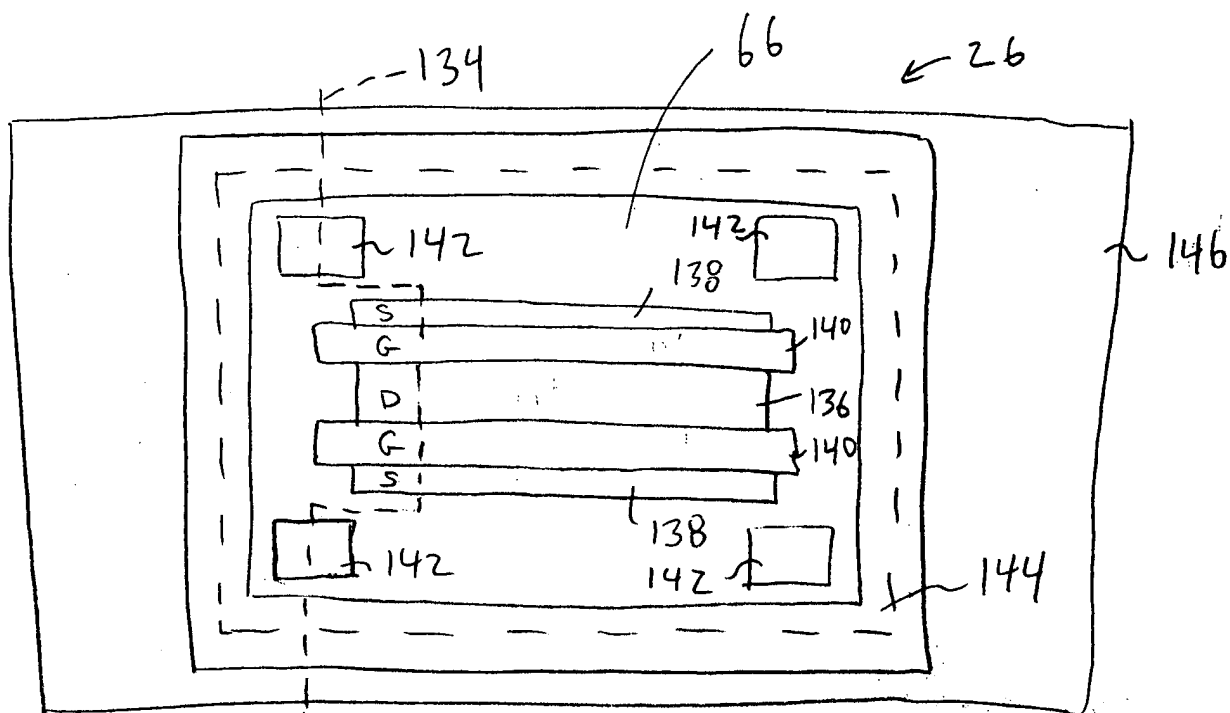


FIG. 13



APPLY PROGRAMMING
VOLTAGE ACROSS
ANTIFUSE (I.E., APPLY
 V_{CC} TO DRAIN AND V_{SS} TO
SOURCE AND GATE) ~ 152

↓

WHILE APPLYING
PROGRAMMING VOLTAGE
ACROSS ANTIFUSE, FORWARD
BIAS SUBSTRATE-SOURCE
JUNCTION TO ASSIST IN
TURNING ANTIFUSE ON ~ 154

↓

CONTINUE APPLYING
PROGRAMMING VOLTAGE
AND BIASING SUBSTRATE
TO PRODUCE HOT CARRIERS
AT PORTION OF CHANNEL
NEAR DRAIN ~ 156

↓

MONITORE OUTPUT VOLTAGE
TO DETERMINE WHEN
GATE OXIDE HAS BROKEN DOWN
OR STOP PROGRAMMING AT
PREDETERMINED TIME (E.G., 10ms) ~ 158

FIG. 15